I C M R

MENUS FOR LOW COST BALANCED DIETS ANDS SCHOOL LUNCH PROGRAMMES

F8,3:2;47
N59
4252

CFTRI-MYSORE
4252
Menus for low co..

INDIAN COUNCIL OF MEDICAL RESEARCH

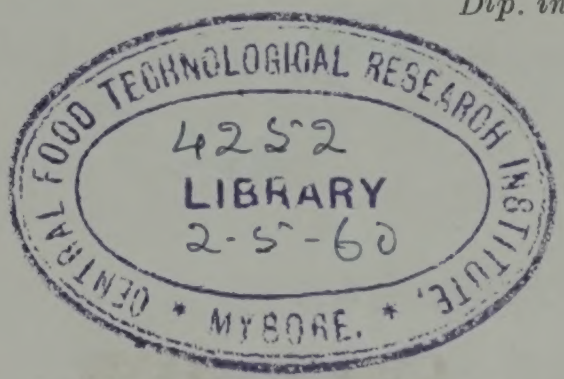
Duplicate copy

MENUS FOR LOW COST BALANCED DIETS AND SCHOOL LUNCH PROGRAMMES

SUITABLE FOR NORTH INDIA

BY

SWARAN PASRICHA, B.A.,
Dip. in Dietetics



NUTRITION RESEARCH LABORATORIES
Indian Council of Medical Research
HYDERABAD, (DECCAN)-7.

Price : 15 nP.

4252
G 783

F8,3:2;47
N59

CFTRI-MYSORE
4252
Menus for low co

Printed by Vishva Bharatya Press, New Delhi GJ. 12(59)—1500C.

PREFACE

A large body of scientific information which could be utilised for improving the dietaries in India has become available as a result of the efforts of research workers in India. Unfortunately, the people have not been in a position to make much use of it for want of authoritative publications which could enable the accumulated knowledge to be put to practical use. The Nutrition Research Laboratories of Indian Council of Medical Research compiled nearly twenty years ago the results of analysis of Indian Foodstuffs which have been published by the Government of India as the popularly known Health Bulletin 23. This bulletin not only gives information on the nutritive value of a large variety of Indian Foodstuffs but also suggestions for the planning of satisfactory diets.

The present publication is designed to help the public in North India by giving practical hints on the preparation of nutritious snacks and meals. The preparations are of the type well-known to our people in North India and have been so designed as to be within the reach of most. It is hoped that this brochure will achieve the object of making the dietaries sufficiently varied and what is more important, provide a basis for balancing the diets from the nutritional standpoint.

NEW DELHI,
10th September, 1959.

C. G. PANDIT
Director

INTRODUCTION

A publication entitled "Menus for low-cost balanced diets and school lunch programmes, suitable for South India" was prepared last year. The purpose of the publication was to provide examples of nutritious dishes which could be easily prepared by using cheap and locally available foodstuffs. The text was intended as a practical guide to the housewife as well as the school authorities to improve the nutritive quality of the diet of adults and school-going children of South India.

It is well-known that the general pattern of diet in Uttar Pradesh and the Punjab in the North differs in certain respects from that obtaining in the Southern States. This does not, however, rule out the fact that people of low economic status in the North subsist on a relatively inadequate diet, hence the need for improving northern dietaries is as urgent as that for the South. The present brochure is prepared on lines similar to the previous one so that the recipes suggested could be employed by people of these regions in the preparation of nutritious and cheap menus resulting in an improvement in the nutritional quality of the diets without any great additional economic strain.

The text is divided into two parts, Part I, deals with recipes suitable for adoption at home and Part II with those suitable for mid-day feeding of school children.

The names of all the preparations are given both in English as well as in Hindi. Hindi equivalents of foodstuffs employed in drawing up the recipes are given in the Appendix.

Since the menus are mainly intended for the low income groups, care has been taken to incorporate mainly food-stuffs which are in daily use in U. P, and the Punjab. A few dishes common to other parts of the country but introduced into U. P. and the Punjab during recent years and known to be relished by sections of the population, are also included. It is felt that the popularisation of these dishes will not in any way disturb the dietary habits of the people and will be most welcome. The recipes have been so framed that not only is the cooking procedure simplified but also the cost of the food per adult does not exceed 50 to 75 nP. per day.

MENUS FOR LOW-COST BALANCED DIETS

The menus suggested are generally based on the following foodstuffs and the amounts shown against each.

	oz.
Cereals	... 15
Pulses	... 3
Green leafy vegetables	... 5
Other vegetables	... 4
Oil	... 1
Jaggery	... 2
Milk	... 4
Fruits	... 2

The amount of foodstuffs given in the above list is estimated to provide 2500 calories and 65 gm. of protein. It may be pointed out, however, that the intake of calories, protein and other nutrients obtainable from the above food-stuffs cannot be considered to be ideal but under the existing economic conditions, it provides all the nutrients well above the margin of safety. Hence it is important to note that in following the instructions in the preparation of the menus, the quantities of some of the foodstuffs mentioned in bold letters in each of the recipes shall not be reduced further. On the other hand, the amounts of other ingredients can be changed according to taste.

The Nutrition Advisory Committee defined an optimum diet as one that provides 300 0calories and 80 gm. of protein besides supplying all the other nutrients in liberal amounts. If it is desired to bring the list of fo odstuffs given above into conformity with the Nutrition Advisory Committee's recommendations, the following principles shall be adopted.

1. Decrease the intake of cereal from 15 oz. to 12 oz.
2. Increase the intake of pulses from 3 oz. to 4 oz.
3. Include at least one egg per day.
4. Increase intake of milk from 4 oz. to 20 oz. if vegetarian and to 10 oz. plus 3 oz. of meat if non-vegetarian.

A number of alternatives have been provided so that there is variety in the food .The information about these alternatives is provided in the Section EXCHANGE LISTS (Page 3).

Daily diet will consist of two principal meals and one light meal taken as snack. In the selection of a menu for the principal meals, one item should be chosen from each of A, B and C in Exchange list I. Buttermilk (equivalent to about 4 oz. of milk) shall be included in at least one principal meal. Instead of the buttermilk, curd or milk can be used. For light meal one item shall be chosen from the Exchange list II. This may be taken with tea or coffee prepared with little milk and jaggery.

EXCHANGE LISTS*

EXCHANGE LIST I.

FOR PRINCIPAL MEALS

A. Cereal Exchange :

(*i*) Wheat (1 and 2)
(*ii*) Bengal gram (3)
(*iii*) Jowar, Bajra, Maize (4)
(*iv*) Rice (5)

It is advised that the same cereal should not be used for both the principal meals in the day.

B. Pulse and Vegetable Exchange :

(*i*) Dal (6), Mint chutney (7), Vegetable bhujia (8)
(*ii*) Dal with calabash cucumber (9), Charla (10)
(*iii*) Curry (11), Green leafy vegetable bhurjee (12)
(*iv*) Vadian (13), Turnips (14)
(*v*) Rajman (15), Raita (16)
(*vi*) Dal with green leafy vegetables (17), Vegetable bhujia (8)
(*vii*) Brinjal Bhurtha (18), and (6)
(*viii*) Rape leaves (19), Raita (16)

C. Fruit Exchange :

One ripe banana or mango or orange or guava.

EXCHANGE LIST II.

FOR LIGHT MEALS

Snack Exchange :

(*i*) Wheat porridge (20)
(*ii*) Wheat pulse ladoo (21)
(*iii*) Khicheri (22)
(*iv*) Pakodai (23)
(*v*) Dosai (24)
(*vi*) Potato gulab jamun (25)
(*vii*) Aalu chole (27)
(*viii*) Dahi vadai (26)
(*ix*) Calabash cucumber halwa (28)
(*x*) Basen omelete (29)
(*xi*) Marunda (30)
(*xii*) Poha (31)
(*xiii*) Fruit chaat (32)
(*xiv*) Pura (33)
(*xv*) Sago vadai (34)
(*xvi*) Khaman dhokla (35)
(*xvii*) Green gram ladoo (36)
(*xviii*) Sprouted green gram with jaggery (37)
(*xix*) Dahi chidwa (38)
(*xx*) Sprouted green gram (39)
(*xxi*) Sweet potato pura (40)

---

*The numerals within parentheses refer to the number in the Section "List of Recipes."

Details of preparations are also given in the same section.

RECIPES*

Exchange List I

1. CHAPATIE
फुलका

		oz.
Wheat Flour	...	7
Oil or ghee (Optional)	...	½–1
Water	...	as required.

Method. Wheat flour kneaded into dough with water. Small portion of dough made into chapatie with rolling board and pin ; placed on a flat iron pan heated on fire and the side turned when slightly baked. When both sides are slightly baked, it is roasted over burning charcoal or puffed with slight pressure with cloth. If oil is to be added, chapatie is rolled along with half a teaspoonful of oil and when one side is cooked, half a teaspoonful more of oil is added and chapatie fried from both sides.

The kneaded dough can be kept over night and 'Khamiri Roti' (खमीरी रोटी) can be cooked just like ordinary chapatie.

2. TANDOOR KI ROTI
तन्दूर की रोटी

		oz.
Wheat Flour	...	7
Ghee or butter (Optional)	...	½–1
Water	...	as required

Method : Wheat flour kneaded into soft dough and divided into small portions. The 'Tandoor' (big fire place made of mud) heated by burning fire wood in it. Chapaties made with hands using water and stuck to inner sides of hot 'Tandoor'. Chapaties removed with cloth, when ready.

3. MISSI ROTI
मिस्सी रोटी

		oz.
Bengal Gram Flour	...	3
Wheat Flour	...	4
Fenugreek leaves or soya leaves	...	8

* Amounts of ingredients are indicated in ounces (1 seer-32 oz.)

		oz.
Onions	...	1
Green chillies	...	$\frac{1}{4}$
Oil	...	1
Salt	...	to taste
Water	...	as required

Method : All ingredients, except oil, mixed and kneaded into dough. Small portions of dough made into chapatie on flat board with rolling pin and placed on heated iron pan. Chapatie turned when slightly baked ; half a teaspoonful of oil poured and chapatie fried on both sides. It can also be cooked in Tandoor.

4. ROTI
रोटी

		oz.
Maize or Bajra or Jowar or Ragi Flour	...	7
Oil	...	1
Celery seeds	...	$\frac{1}{16}$
Salt	...	to taste
Hot water	...	as required

Method : Flour and celery seeds are mixed with a little powdered salt and divided into three portions ; hot water in sufficient quantity added gradually to one portion and kneaded for about five minutes to make into a dough. Kneaded dough is made into a ball and then into chapatie, placed on a heated iron pan smeared with a little oil and spread with fingers. When cooked, a little oil is poured over uncooked side, turned and cooked. Similarly two more Roties made one after the other from the two remaining portions.

5. COOKED CEREALS
चावल आदि

		oz.
Wheat or Rice or Bajra or Jowar (Whole grain)	...	7
Water	...	as required

Method :

For rice—washed once or twice with minimal quantities of water, then boiled in just sufficient water till cooked.

For other cereals—pounded in a mortal till bran, husk, chaff etc,. are

released : winnowed free of bran etc., and cleaned grain broken and boiled in just sufficient water till cooked.

6. DAL
दाल

		oz.
Black Gram Dal	...	1
Bengal Gram Dal	...	1
Turmeric	...	$\frac{1}{16}$
Chillie powder	...	$\frac{1}{16}$
Onion	...	$\frac{1}{4}$
Ginger	...	$\frac{1}{8}$
Oil	...	$\frac{1}{8}$
Garam masala.*	...	$\frac{1}{8}$
Salt	...	to taste
Water	...	as required

Method : The two dals are cleaned and cooked in water with salt chillie powder and turmeric till very soft and semi-solid, care being taken to see that grains do not break. Chopped onion and ginger fried in oil are added to hot dal; garam masala is then sprinkled over it.

7. MINT CHUTNEY
पुदीने की चटनी

		oz.
Mint	...	1
Onion	...	$\frac{1}{2}$
Green chillies	...	$\frac{1}{8}$
Green mangoe	...	$\frac{1}{8}$
Or dried pomegranate seeds	...	$\frac{1}{16}$
Salt	...	to taste

Method : All vegetables are washed, cut and ground together on a grinding stone with the addition of salt.

8. VEGETABLE BHUJIA
सूखी सब्जी

		oz.
Brinjal or Cauliflower or Cabbage or Calabash Cucumber or Ladies Fingers or Tinda	...	4

* The preparation of garam masala is given in page 12.

		oz.
Oil	...	$\frac{1}{4}$
Onion	...	$\frac{1}{2}$
Ginger (only for cauliflower)	...	$\frac{1}{8}$
Chillie powder	...	$\frac{1}{16}$
Coriander leaves	...	$\frac{1}{8}$
Turmeric	...	$\frac{1}{16}$
Salt	...	to taste

Method : Sliced ginger and onions are fried in oil till golden brown ; vegetables are washed and cut, salt, turmeric and chillie powder added and cooked on slow fire till soft. Chopped coriander leaves are added and vegetable fried till all water is absorbed. Remove from fire and sprinkle garam masala.

9. DAL WITH CALABASH CUCUMBER
लौकी वाली दाल

		oz.
Bengal Gram Dal	...	1
Calabash Cucumber	...	5
Chillie powder	...	$\frac{1}{16}$
Oil or hydrogenated fat	...	$\frac{1}{8}$
Cumin	...	$\frac{1}{16}$
Turmeric	...	$\frac{1}{16}$
Garam masala	...	$\frac{1}{16}$
Salt	...	to taste
Water	...	as required

Method : Dal is cleaned and cooked in water till slightly soft ; small pieces of calabash cucumber along with salt, chillie powder and turmeric are added and cooked till very soft and semi-solid in consistency; cumin is fried in oil and added to above. Then garam masala is sprinkled over.

10. CHARLA
शरला

		oz.
Small Potatoes	...	4
Oil	...	$\frac{1}{8}$
Chillie powder	...	$\frac{1}{8}$
Garam masala	...	$\frac{1}{16}$

Salt	...	to taste
Water	...	as required

Method : Chillie powder is lightly fried in hot oil, potatoes and salt are added and cooked with little water till soft ; fried for a little while and garam masala is sprinkled.

11. CURRY
कड़ी

		oz.
Bengal Gram Dal Flour	...	$\frac{3}{4}$
Butter milk	...	20
Chillie powder	...	$\frac{1}{16}$
Oil	...	$\frac{1}{8}$
Turmeric	...	$\frac{1}{16}$
Coriander seeds	...	$\frac{1}{16}$
Onion	...	1
Garam masala	...	$\frac{1}{16}$
Salt	...	to taste
Water	...	as required
* Pakodai (Optional)	...	Ten

Method : Bengal gram dal flour is mixed with buttermilk, salt, turmeric, chillie powder and the mixture is kept aside. Sliced onions and oriander seeds are fried in oil and mixed with above. Plenty of water is cadded to the above and cooked, till thick, and till raw taste disappears stirring all the time. Garam masala is sprinkled. Fried pakodai may be added about five minutes before removing from fire.

12. GREEN LEAFY VEGETABLE BHURJEE
साग

		oz
Fenugreek Leaves or Spinach or Bathua or Cholai or Rape Leaves	...	5
Potatoes	...	4
Green chillies	...	$\frac{1}{8}$
Oil	...	$\frac{1}{8}$
Salt	...	to taste

Method : Sliced green chillies are fried in oil ; green leafy vegetables are washed and cut, small pieces of potatoes and salt are added to it,

---

* See page 13. Recipe No- 23.

covered and cooked on slow fire. When water is absorbed and vegetables become soft, fried for a few minutes.

13. VADIAN CURRY
बड़ियाँ

		oz.
† Vadian	...	1
Potatoes	...	4
Cumin	...	$\frac{1}{16}$
Turmeric	...	$\frac{1}{16}$
Garam masala	...	$\frac{1}{16}$
Oil or hydrogenated fat	...	$\frac{1}{8}$
Salt	...	to taste
Water	...	as required

Method : Vadian are fried in oil and kept aside ; cumin is fried in same oil and potatoes, turmeric, salt added and cooked till potatoes are half done ; when they are fried, vadian are added ; cooked till soft till little gravy remains. Garam masala is sprinkled finally.

14. TURNIPS
शलगम

		oz.
Turnips	...	5
Ginger	...	$\frac{1}{16}$
Oil	...	$\frac{1}{16}$
Turmeric	...	$\frac{1}{28}$
Green chillies	...	$\frac{1}{16}$
Coriander leaves	...	$\frac{1}{16}$
Garam masala	...	$\frac{1}{16}$
Wheat flour or maize flour	...	$\frac{1}{8}$
Sugar (Optional)	...	$\frac{1}{16}$
Salt	...	to taste
Water	...	as required

Method : Turnips are peeled, cut and cooked in water till soft. Extra water is decanted, salt, turmeric and chillies are added and the whole is mashed with ladle till no solid pieces are left ; sugar and maize flour are added and allowed to cook for a few minutes. Sliced onion and

† The preparation of vadian is given in page 12

ginger fried in oil are added to vegetable. Chopped coriander leaves and garam masala are sprinkled over.

15. RAJMAH
राजमा

		oz.
Rajmah or Rawan	...	2
Onion	...	1
Tomato	...	$\frac{1}{2}$
Chillie powder	...	$\frac{1}{16}$
Turmeric	...	$\frac{1}{16}$
Ginger	...	$\frac{1}{8}$
Oil	...	$\frac{1}{8}$
Garam masala	...	$\frac{1}{16}$
Salt	...	to taste
Water	...	as required

Method : Cleaned rajmah is soaked overnight, boiled till soft and kept aside ; ground onion and ginger are fried in oil, chopped tomato added and fried, then added to boiled rajmah along with rest of ingredients (except garam masala) and cooked for a few minutes. Garam masala is finally sprinkled. The final preparation should have a little gravy.

Rajmah may be cooked with equal quantities of black gram (whole) but onion and ginger should be chopped as in case of ordinary dal (No. 6). No turmeric is added to this dal.

16. RAITA
रायता

		oz.
Curd	...	4
Potato or Cucumber or Mint or Calabash Cucumber	...	2
Garam masala	...	$\frac{1}{16}$
Red chillie powder	...	$\frac{1}{16}$
Roasted cumin powder	...	$\frac{1}{16}$
Salt	...	to taste

Method : Boiled potatoes are cut into small pieces and added to churned curd along with spices. If calabash cucumber is to be used, it

should be grated, boiled, the water squeezed out and then added to churned curd. Cucumber and other vegetables are merely chopped and added to churned curd.

17. DAL WITH GREEN LEAFY VEGETABLE
दाल वाला साग

		oz.
Green Gram or Green Gram Dal or Bengal Gram Dal	...	1
Spinach or Bathua or Chulai	...	5
Oil	...	$\frac{1}{4}$
Onion	...	$\frac{1}{2}$
Green chillies	...	$\frac{1}{8}$
Salt	...	to taste
Water	...	as required

Method : Dal is cleaned and boiled till slightly soft ; green leafy vegetable, chopped green chillies and salt are added and cooked till very soft, mashed with ladle or churner and cooked again for a few minutes. Chopped onions are fried in oil and added to the curry.

18. BRINJAL BHURTHA
भुर्था

		oz.
Brinjal	...	4
Tomato	...	1
Onion	...	1
Chillie powder	...	$\frac{1}{8}$
Coriander leaves	...	$\frac{1}{8}$
Garam masala	...	$\frac{1}{12}$
Oil	...	$\frac{1}{4}$

Method : Brinjal smeared with a little oil is roasted on fire ; peeled, washed, mashed and kept aside. Chopped onions are fried, tomato added and both are fried for a little while ; chillie powder, salt and mashed brinjal added and fried till bhurtha does not stick to the sides of the pan ; chopped coriander leaves and garam masala are then added.

19. RAPE LEAVES
सरसों का साग

		oz.
Rape Leaves	...	4
Spinach	...	1
Ginger	...	$\frac{1}{4}$
Green chillies	...	$\frac{1}{8}$
Maize flour	...	$\frac{1}{8}$
Oil or ghee	...	$\frac{1}{8}$
Water	...	as required
Salt	...	to taste

Method : Rape leaves, spinach and green chillies are cut and cooked in plenty of water ; extra water decanted, salt added and vegetable ground till finely mashed. Maize flour is added and cooked for about five minutes ; fried ginger added finally.

GARAM MASALA
गर्म मसाला

		oz.
Big cardamom	...	2
Black pepper	...	8
Black cumin	...	2
Coriander seeds	...	4
Cinnamon	...	$\frac{1}{2}$
Cloves	...	$\frac{1}{4}$

Method : Cleaned condiments are dried in sun ; cardamom is peeled and all ingredients mixed, powdered finely and stored in air-tight tins.

VADIAN

Black gram dal or green gram dal is soaked over-night and ground ; salt is added and fermented for 24 hrs.,small portions are dried in sun and stored.

Exchange List II

20. WHEAT PORRIDGE
दलिया

		oz.
Broken Wheat	...	3
Green Gram	...	1
Milk	...	4
Jaggery	...	2
Water	...	as required

Method : Broken wheat is roasted in a pan, green gram and water added and cooked till grains are soft ; jaggery is mixed with water, strained to remove impurities and added to above. Again cooked till semi-solid. Then removed from fire and hot milk is added.

Note : Instead of jaggery a little salt may be added, when being cooked. Sometimes this preparation can be consumed without milk. The difference in nutritive value will however be appreciable if milk is not included.

21. WHEAT PULSE LADOOS
दाल गेहूं के लड्डू

		oz.
Roasted Bengal Gram Flour	...	1
Roasted Wheat Flour	...	1
Jaggery powder	...	½
Water or milk as binder	...	as required

Method : All ingredients mixed and made into small balls.

22. KHICHERI
खिचड़ी

		oz.
Rice	...	1
Green Gram or Bengal Gram Dal	...	1
Water	...	as required
Salt	...	to taste

Method : Cleaned rice and dal cooked in water with salt till grains are soft and water absorbed. A little cumin is fried in ghee or oil and added towards the end (optional).

When Bengal gram dal is used it should be partly cooked before rice is added.

23. PAKODAI

पकौड़े

		oz.
Bengal Gram Flour	...	$1\frac{1}{2}$
Vegetable	...	5
(Brinjal, onion, potato, cauliflower, green leafy vegetables) Oil (absorbed by pakodai)	...	$\frac{1}{2}$
Chillie powder	...	$\frac{1}{16}$
Salt	...	to taste
Water	...	as required

Method : Bengal gram flour, salt and chillie powder are mixed and made into thin paste with water. Sliced vegetables are smeared with salt and chillie powder and kept for a few minutes ; extra water of vegetables is discarded ; vegetables are dipped in thin paste of Bengal gram flour and deep fried in oil.

24. DOSAI

डोसे

		oz.
Rice	...	2
Black Gram Dal	...	1
Oil	...	1
Salt	...	to taste
Water	...	as required

Method : Rice and dal soaked separately in water over-night and finely ground together, the batter is mixed well, and salt and sufficient water added to make a thin paste ; the whole is kept aside for a few hours to ferment. Ladlefuls are spread evenly over heated iron plate on open fire, smeared with a little oil and cooked on both sides.

25. POTATO GULABJAMUN

आलू के गुलाब जामुन

		oz.
Potato	...	2
Skimmed Milk Powder or Khoa prepared from Skimmed Milk	...	1
Ghee or hydrogenated fat (absorbed by Gulabjamun)	...	$\frac{1}{8}$
Jaggery	...	1
White Flour	...	$\frac{1}{8}$
Butter	...	$\frac{1}{8}$
Baking powder	...	a small pinch
Water	...	as required

Method : Potatoes are boiled, mashed and mixed with white flour, skimmed milk powder, baking powder and butter to make a dough. It is divided into several small balls and fried in ghee or hydrogenated oil till dark brown, then left immersed in hot jaggery syrup for two hours.

26. DAHI VADAI
दही वड़े

		oz.
Curd	...	4
Green Gram or Black Gram Dal	...	1
Oil (absorbed by Vadais)	...	$\frac{1}{3}$
Chillie powder	...	$\frac{1}{16}$
Roasted cumin powder	...	$\frac{1}{16}$
Garam masala	...	$\frac{1}{28}$
Salt	...	to taste

Method : Green gram dal is soaked overnight and ground properly till it becomes frothy ; small portions are deep fried and soaked in salted water for a few minutes ; vadais are pressed to extract water and oil and added to churned curd along with spices and condiments.

Note : These vadais can straightaway be put into sugar or jaggery syrup instead of curd. This preparation is known as Rasbarry.

27. AALU CHOLE
आलू छोले

		oz.
Kabuli or White Gram	...	2
Bengal Gram Dal	...	$\frac{1}{2}$
Potato	...	2
Onions	...	1
Ginger	...	$\frac{1}{8}$
Mango powder (Optional)	...	$\frac{1}{16}$
Chillie powder	...	$\frac{1}{8}$
Green chillies	...	$\frac{1}{8}$
Tamarind pulp	...	$\frac{1}{2}$
Oil	...	$\frac{1}{8}$
Salt	...	to taste
Water	...	as required

Method : Gram and Bengal gram dal are soaked overnight and

boiled till quite soft ; ground and fried onions, boiled dal, salt, chillie powder and boiled potatoes are mixed and cooked for a few minutes ; sliced ginger added ; removed from fire, whole green chillies, tamarind pulp and mango powder are added. There should be no gravy in it.

28. CALABASH CUCUMBER HALWA
लौकी का हलवा

		oz.
Calabash Cucumber	...	8
Skimmed Milk	...	8
Sugar or brown sugar	...	1
Ghee or hydrogenated fat	...	$\frac{1}{8}$

Method : Grated calabash cucumber is cooked with skimmed milk till very soft, brown sugar is added and cooked further till all water is absorbed. Ghee or hydrogenated fat added and halwa is fried for a few minutes.

29. BASEN OMELETE
बेसन का पूड़ा

		oz.
Bengal Gram Flour	...	2
Onion	...	$\frac{1}{2}$
Green chillies	...	$\frac{1}{8}$
Tomato (Optional)	...	1
Oil or hydrogenated fat	...	$\frac{1}{5}$
Salt	...	to taste
Water	...	as required

Method : Bengal gram flour is mixed with chopped onion, green chillies, salt and water to make thin paste. Ladlefuls are spread evenly over heated iron plate smeared with a little oil and cooked on both sides.

30. MARUNDA
मरूण्डा

		oz.
Roasted Wheat, Roasted Ground nut, Roasted Bengal Gram	...	1
Jaggery	...	$1\frac{1}{4}$
Water	...	to prepare syrup.

Method I : Jaggery is boiled with a little water till thick and frothy, wheat added, mixed well and made into balls.

Puffed rice and pop corn may be used and amount of jaggery increased according to taste.

Method II : (Suitable where roasted Bengal gram and groundnuts are available piping hot).

Hot roasted Bengal gram is mixed with powdered jaggery and made into balls in a clean cloth.

31. POHE
पोहे

		oz.
Beaten Rice	...	2
Peas or Potatoes	...	2
Onion	...	1
Mustard seeds	...	$\frac{1}{16}$
Coconut (Optional)	...	$\frac{1}{4}$
Oil	...	$\frac{1}{8}$
Sugar (Optional)	...	$\frac{1}{8}$
Turmeric	...	$\frac{1}{16}$
Green chillies	...	$\frac{1}{28}$
Asafoetida (Optional)	...	$\frac{1}{16}$
Lime juice	...	$\frac{1}{2}$
Salt	...	to taste
Water	...	as required

Method : Sliced onion is browned in oil, powdered asafoetida, chopped green chillies and mustard seeds are added and fried for a few seconds. Peas along with salt, turmeric and water are added, cooked till soft. Beaten rice is cleaned and washed and added to cooked peas and cooking continued for a few seconds ; sugar is added and then removed from fire. Grated coconut and lime juice are added and mixed well.

32. FRUIT CHAAT
फल की चाट

		oz.
Banana	...	1
Potato (boiled)	...	1
Sweet potato (boiled)	...	1
Guava	...	1

		oz.
Bilimbi	...	$\frac{1}{2}$
Lime or lemon juice	...	$\frac{1}{4}$
Chillie powder	...	$\frac{1}{8}$
Mango powder	...	$\frac{1}{8}$
Roasted cumin powder	...	$\frac{1}{16}$
Sugar (Optional)	...	$\frac{1}{8}$
Salt	...	to taste

Method : All fruits are cut into small pieces and mixed with spices ; lime juice is added as required.

33. PURA
पूड़े

		oz.
Wheat flour	...	2
Brown sugar or sugar	...	1
Aniseed	...	$\frac{1}{16}$
Ghee or hydrogenated fat	...	$\frac{1}{2}$
Water	...	as required

Method : Sugar is dissolved in water, mixed with wheat flour and aniseed to make thin batter and kept aside for a few minutes. Ladlefuls pread evenly over heated iron plate smeared with a little ghee or hydrogenated fat and cooked on both sides.

SAGO VADAI
साबू दाने के बड़े

		oz.
Potatoes	...	2
Sago	...	1
Green chillies	...	$\frac{1}{8}$
Coriander leaves	...	$\frac{1}{8}$
Oil (absorbed by Vadais)	...	$\frac{1}{3}$
Salt	...	to taste

Method : Washed sago is soaked in just sufficient water for about half an hour to make the grains soft and mixed wih boiled mashed potatoes, chopped green chillies, coriander leaves and salt ; mixture is divided into small balls, flattened between the pabus of the hands and fried in oil till light brown.

35. KHAMAN DHOKLA
खमन ढोकला

		oz.
Bengal Gram Dal Flour	...	2
Butter milk	...	5
Green chillies	...	$\frac{1}{8}$
Mustard seeds	...	$\frac{1}{16}$
Oil	...	$\frac{1}{16}$
Turmeric	...	$\frac{1}{16}$
Ginger	...	$\frac{1}{8}$
Asafoetida (Optional)	...	$\frac{1}{28}$
Coriander leaves	...	$\frac{1}{8}$
Salt	...	to taste

Method : Bengal gram dal flour is soaked in butter-milk and allowed to ferment for eighteen to twenty-four hours depending upon the season ; salt, turmeric, chopped ginger and green chillies are added to the above and steamed till set (called Dhokla). Mustard seeds and asafoetida are fried in oil and poured over Dhokla which is then cut into small pieces. Coriander leaves may be added along with mustard.

Instead f 2 oz. of Ben gal gram dal flour, 1 oz. of Bengal gram dal flour and 1 oz. of Bengal gram dal may be used but dal should be soaked for 12 hours and should be ground and then mixed with Bengal gram dal flour, butter milk etc.

36. GREEN GRAM LADOOS
मूँग की दाल के लड्डू

		oz.
Green Gram Dal	..	2
Jaggery	...	1
Coconut (Optional)	...	$\frac{1}{2}$
Water	...	as required

Method : Green gram dal is roasted and powdered, thick syrup prepared with jaggery, mixed with flour and made into small balls. Grated coconut or any other nuts may be added before making balls.

37. SPROUTED GREEN GRAM WITH JAGGERY
अंकुर निकली हुई मूँग की दाल

		oz.
Sprouted Green Gram	...	2

		oz.
Jaggery	...	2
Water	...	as required

Method : Green gram is soaked overnight, kept moist for one day so that it sprouts, then cooked with jaggery till all water is absorbed.

38. DAHI CHIDWA
दही चिढ़वे

		oz.
Beaten Rice	...	1
Curd	...	4
Jaggery	...	1

Method : Beaten rice (chidwa) is washed and kept for about five minutes to soften. Curd is churned, jaggery added then the soft beaten rice is added and mixed well.

39. SPROUTED GREEN GRAM
अँकुर वाली दाल

		oz.
Sprouted Green Gram	...	2
Chillie powder	...	$\frac{1}{16}$
Garlic (Optional)	...	$\frac{1}{16}$
Pepper	...	$\frac{1}{16}$
Turmeric	...	$\frac{1}{16}$
Onion	...	$\frac{1}{4}$
Tamarind pulp	...	$\frac{1}{8}$
Mustard (Optional)	...	$\frac{1}{16}$
Oil	...	$\frac{1}{8}$
Water	...	as required
Salt	...	to taste

Method : A little garlic, onion, mustard and pepper are ground and added to boiled sprouted green gram along with other condiments and cooked till raw flavour disappears. Oil is heated in pan, remaining garlic is fried and added to cooked dal ; no liquid should remain in this preparation.

40. SWEET POTATO PURA
शक्कर गढ़ो का पूड़ा

		oz.
Sweet Potato	...	4
Whole or refined Wheat Flour (Atta or Maida)	...	$\frac{1}{3}$
Sugar or brown sugar	...	$\frac{1}{2}$
Ghee or hydrogenated fat (absorbed by puras)	...	$\frac{1}{2}$

Method : Boiled and mashed sweet potatoes are mixed with flour and brown sugar ; made into small chapaties and fried till golden brown.

Menus	Programme of feeding	Calories	Protein gm.	Approximate cost nP.
A. Mid-day Meals				
1. Maize Roti (1)+Rape leaves (2)+butter milk (7)		380	16	16
2. Khichari (2)+Curd (6)+Vegetable Bhujia (3)		400	18	11
3. Porridge (11)+Vegetable bhujia (3)+butter milk (7)		480	22	10
4. Bajra Cooked (10)+Curry (4)		430	15	7
5. Tandoor Ki Roti (8)+Aalu chole (5)	For three days	420	16	7
6. Missi Roti (9)+Curd (6)	in a week	560	17	13
B. Mid-day Snacks				
7. Wheat pulse ladoo (14)+butter milk (7)		540	20	9
8. Toffee (21)+butter milk (7)		430	22	15
9. Aalu Chole (5)+bread		370	14	13
10. Dahi Vadai (15)		470	30	15
11. Basen Omelete (13)+Toffee ($\frac{1}{4}$ quantity prescribed in (21)+butter milk (7)		452	27	11
12. Toffee ($\frac{1}{2}$ quantity prescribed in (21)+Aalu Cholo ($\frac{1}{2}$ quantity prescribed in (5)+butter milk (7)		450	22	13
13. Sweet biscuit ($\frac{1}{2}$ quantity prescribed in (22)+Dahi vadai ($\frac{1}{2}$ quantity prescribed in (15)		440	27	14
14. Potato gulab jamun ($\frac{1}{2}$ quantity prescribed in (16)+Dosai ($\frac{3}{4}$ quantity prescribed in (17)	For two days in a week	560	13	13
15. Basen omelate+Toffee ($\frac{1}{2}$ quantity prescribed in (21)		420	23	10
16. Fruit Chaat+Wheat pulse ladoo ($\frac{1}{2}$ quantity prescribed in (14) + butter milk (7)		430	13	11
17. Marunda (18)+Khaman Dhokla (19)		560	27	13
C. Meal-Snack Combination				
For two days in a week to begin with, if items under group B are not acceptable by themselves.				
18. Missi Roti (9) + Curd (6) + Sweet Biscuit ($\frac{1}{4}$ quantity prescribad in (22		400	17	11
19. Khichari (12) + Curd (6) + Toffee ($\frac{1}{4}$quantity prescribed in (21)		450	22	12
20. Porridge ($\frac{1}{2}$ quantity prescribed in (11) + butter milk (7) + Aalu chole (5)		440	22	10

RECIPES

1. MAIZE CHAPATIE
मक्की की रोटी

		oz.
Maize Flour	...	2
Oil	...	$\frac{1}{8}$
Salt	...	to taste
Hot water	...	as required
Celery seeds	...	a little

Method : as for item 4, Part I page 5.

2. RAPE LEAVES
सरसों का साग

		oz.
Rape Leaves	...	4
Spinach	...	$\frac{3}{4}$
Maize Flour	...	$\frac{1}{8}$
Ghee or Butter	...	$\frac{1}{8}$
Ginger	...	$\frac{1}{4}$
Green chillies	...	$\frac{1}{8}$
Salt	...	to taste
Water	...	as required

Method : as for item 19 Part I page 12.

3. VEGETABLE BHUJIA
सूखी सब्जी

		oz.
Brinjals or Cauliflower or Cabbage or Calabash Cucumber or Ladies Fingers or Tinda		4
Oil	...	$\frac{1}{4}$
Onion	...	$\frac{1}{2}$
Ginger (only for cauliflower)	...	$\frac{1}{8}$
Chillie powder	...	$\frac{1}{28}$
Coriander leaves	...	$\frac{1}{8}$
Turmeric	...	a little
Salt	...	to taste

Method : as for item 8 Part I page 6.

4. CURRY
कढ़ी

		oz.
Bengal Gram Dal Flour	...	$\frac{1}{8}$
Butter Milk	...	10
Oil	...	$\frac{1}{16}$
Onions	...	$\frac{1}{2}$
Chillie powder	...	a little
Turmeric	...	alittle
Coriander seeds	...	a little
Garam masala	...	a little
Salt	...	to taste
Water	...	as required

Method : as for item 11 Part I page 8.

5. AALU CHOLE
आलू छोले

		oz.
Kabuli or White Gram	...	1
Potato	...	1
Oil	...	$\frac{1}{16}$
Bengal Gram Dal	...	$\frac{1}{4}$
Onion	...	$\frac{1}{2}$
Ginger (Optional)	...	$\frac{1}{16}$
Chillie powder	...	$\frac{1}{16}$
Green chillies	...	$\frac{1}{16}$
Tamarind pulp	...	$\frac{1}{2}$
Mango powder (Optional)	...	a little
Salt	...	to taste
Water	...	as required

Method : as for item 27 Part I page 15.

6. CURD
दही

		oz.
Skimmed Milk Powder	...	$\frac{1}{2}$
or		
Skimmed Milk Fresh	...	6
Water to make milk	...	5
Curd	...	a little

Method : A little curd is added to luke-warm milk and kept overnight in a warm place.

7. BUTTER MILK
लस्सी

		oz.
Skimmed Milk Powder	...	$\frac{1}{4}$
or		
Skimmed Milk Fresh	...	3
Curd	...	a little
Water	...	6

Method : The curd is prepared and diluted with water.

8. TANDOOR KI ROTI
तन्दूर की रोटी

		oz.
Wheat Flour	...	2
Ghee or Butter	...	$\frac{1}{4}$
Water	...	as required

Method : as for item 2 Part I page 4.

9. MISSI ROTI
मिस्सी रोटी

		oz.
Bengal Gram Flour	...	1
Wheat Flour	...	1
Fenugreek Leaves or Soya Leaves	...	3
Oil	...	$\frac{1}{8}$
Onions	...	$\frac{1}{3}$
Green chillies	...	$\frac{1}{8}$
Salt	...	to taste
Water	...	as required

Method : as for item 3 Part I page 4.

10. BAJRA COOKED
बाजरा

		oz.
Bajra	...	3
Water	...	as required

Method : as for item 5 Part I page 5.

11. PORRIDGE
दलिया

		oz.
Broken Wheat	...	3
Green Gram Dal	...	1
Ghee or Hydrogenated Fat	...	$\frac{1}{8}$
Cumin (Optional)	...	$\frac{1}{16}$
Salt	...	to taste
Water	...	as required

Method : as for item 20 Part I page 12.

12. KHICHERI
खिचड़ी

		oz.
Rice	...	$1\frac{1}{2}$
Green Gram Dal or Bengal Gram Dal	...	$1\frac{1}{2}$
Ghee	...	$\frac{1}{16}$
Cumin	...	$\frac{1}{16}$
Salt	...	to taste
Water	...	as required

Method : as for item 22 Part I page 13.

13. BASEN OMELETE
बेसन का पूड़ा

		oz.
Bengal Gram Dal Flour	...	3
Oil	...	$\frac{1}{4}$
Onion	...	$\frac{3}{4}$
Green chillies	...	$\frac{1}{8}$
Tomato (Optional)	...	$1\frac{1}{2}$
Salt	...	to taste
Water	...	as required

Method : as for item 29 Part I page 16.

14. WHEAT PULSE LADOO
दाल गेहूँ का लड्डू

		oz.
Roasted Bengal Gram Flour	...	2
Roasted Wheat Flour	...	2
Jaggery powder	...	1

Water or milk as binder	...	as required

Method : as for item 21 Part I page 13.

15. DAHI VADAI
दही बड़े

		oz.
Curd	...	8
Green Gram Dal or Black Gram Dal	...	2
Oil (absorbed by vadais)	...	$\frac{2}{3}$
Chillie powder	...	$\frac{1}{16}$
Roasted cumin powder	...	$\frac{1}{16}$
Garam masala	...	$\frac{1}{16}$
Salt	...	to taste

Method : as for item 26 Part I page 15.

16. POTATO GULABJAMUN
आलू के गुलाब जामुन

		oz.
Potato	...	2
Skimmed Milk Powder or Khoa with Fresh Skimmed Milk Jaggery	...	1
White Flour	...	$\frac{1}{8}$
Ghee or hydrogenated fat (absorbed by gulabjamun)	...	$\frac{1}{8}$
Butter	...	$\frac{1}{8}$
Baking powder	...	a small pinch
Water	...	as required

Method : as for item 25 Part I page 14.

17. DOSAI
डोसे

		oz.
Rice	...	2
Black Gram Dal	...	1
Oil	...	1
Salt	...	to taste
Water	...	as required

Method : as for item 24 Part I page 14.

18. MARUNDA

मरुण्डा

		oz.
Roasted Wheat or Roasted Ground Nut or Roasted Bengal Gram	...	1
Jaggery	...	$1\frac{1}{4}$
Water	...	a little

Method : as for item 30 Part I page 16.

19. KHAMAN DHOKLA

खमन डोकला

		oz.
Bengal Gram Dal	...	1
Bengal Gram Powder	...	1
Butter Milk	...	5
Oil	...	$\frac{1}{16}$
Green chillies	...	$\frac{1}{8}$
Mustard seeds	...	$\frac{1}{16}$
Turmeric	...	$\frac{1}{16}$
Ginger	...	$\frac{1}{8}$
Asafoetida (Optional)	...	$\frac{1}{28}$
Coriander leaves	...	$\frac{1}{18}$
Salt	...	to taste

Method : as for item 35 Part I page 19.

20. FRUIT CHAAT

फल की चाट

		oz.
Banana	...	1
Potato (boiled)	...	1
Sweet Potato (boiled)	...	1
Guava	...	1
Bilimbi	...	$\frac{1}{2}$
Lime	...	$\frac{1}{4}$
Chillie powder	...	$\frac{1}{8}$

Method : as for item 32 Part I page 17.

21. TOFFEE

टौफी

		oz.
Roasted Bengal Gram Powder	...	$\frac{1}{2}$

Roasted Ground nut Powder	...	$\frac{1}{2}$
Jaggery Powder	...	$\frac{3}{4}$
Skimmed Milk Powder	...	1
Grated coconut	...	$\frac{3}{4}$
Water	...	as required

Method : Jaggery is made into thick syrup with boiling water : other ingredients added, mixed well and spread evenly over plate and cut into small cubes.

22. BISCUIT (SWEET)
मीठे बिस्कुट

		oz.
Roasted Bengal Gram Powder	...	$\frac{1}{2}$
Roasted Groundnut Powder	...	$\frac{1}{2}$
Wheat Flour	...	$\frac{3}{4}$
Skimmed Milk Powder	...	$\frac{7}{8}$
Ghee or hydrogenated fat	...	$\frac{1}{6}$
Jaggery Powder	...	$\frac{3}{4}$

23. BISCUIT (SALTED)
नमकीन बिस्कुट

		oz.
Roasted Bengal Gram Powder	...	$\frac{1}{2}$
Roasted Ground Nut Powder	...	$\frac{1}{2}$
Wheat Flour	...	$1\frac{1}{2}$
Skimmed Milk Powder	...	$\frac{7}{8}$
Ghee or hydrogenated fat	...	$\frac{1}{6}$
Salt	...	to taste

Method : All ingredients are mixed and made into a stiff dough with water ; dough is divided into small portions and each portion rolled out into a round flat biscuit ; the biscuits are, baked over heated iron plate till slightly golden brown. Biscuits may be baked in an oven if facilities are available.

Note : For sweet biscuits, jaggery dissolved in water and strained is used, the dough being made with this jaggery solution.

APPENDIX

CEREALS

	English		*Hindi*
1.	Beaten rice	...	Chidwe
2.	Bengal gram dal flour	...	Basen
3.	Broken wheat	...	Dalia
4.	Maize	...	Makki
5.	Pop corn	...	Phoole
6.	Puffed rice	...	Murmure
7.	Rice	...	Chawal
8.	Roasted Bengal gram	...	Bhune hue chane
9.	Sago	...	Saboodana
10.	Wheat	...	Gahun
11.	Wheat flour, refined	...	Maida
12.	Wheat flour, whole	...	Atta

PULSES

1.	Bengal gram dal	...	Chane ki dal
2.	Black gram dal	...	Urd ki dal
3.	Black gram whole	...	Sabut urd
4.	Green gram dal	...	Moong ki dal
5.	Green gram	...	Sabut mong
6.	Lentil	...	Masoor ki dal
7.	White gram	...	Kabuli chane or Safed chane

VEGETABLES

1.	Large round brinjal	...	Bara gole baingan
2.	Brinjal	...	Baingan
3.	Cabbage	...	Bund gobhi
4.	Calabash cucumber	...	Lauki or Gheia
5.	Coriander leaves	...	Hara dhania
6.	Carrot	...	Gajar
7.	Cucumber	...	Kheera
8.	Penugreek leaves	...	Methi
9.	Green mango	...	Kacha aam
10.	Ladies finger	...	Bhindi
11.	Mint	...	Pudina
12.	Onion	...	Pyaj
13.	Peas	...	Matar
14.	Potato	...	Aalu
15.	Rape leaves	...	Sarson
16.	Spinach	...	Palak
17.	Sweet potato	...	Shakarkandi
18.	Tomato	...	Tamator
19.	Turnips	...	Shalgam

APPENDIX—(*Contd.*)

FRUIT

	English		*Hindi*
1.	Banana	...	Kela
2.	Bilimbi	...	Kamrak
3.	Guava	...	Amrood
4.	Lime	...	Nimbu
5.	Orange	...	Santra or Narangi

CONDIMENTS

1.	Aniseed	...	Saunf
2.	Asafoetida	...	Hing
3.	Big cardamom	...	Bari elaichi
4.	Black cumin	...	Kala zeera
5.	Celery seeds	...	Ajwan
6.	Chillie powder	...	Lal mirch
7.	Chillie green	...	Hari mirch
8.	Cinnamon	...	Dalchini
9.	Cloves	...	Laung
10.	Corriander seeds	...	Dhania
11.	Cumin	...	Zeera
12.	Dried pomegranate seeds	...	Anaardana
13.	Garlic	...	Lasan
14.	Ginger	...	Adrak
15.	Mustard seed	...	Rai
16.	Pepper	...	Kali mirch
17.	Salt	...	Namak
18.	Tamarind	...	Imli
19.	Turmeric	...	Haldi

CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE, MYSORE.
LIBRARY
2-S-60
425.2

MILK

1.	Butter milk	...	Lassi
2.	Curd	...	Dahi
3.	Milk	...	Doodh
4.	Skimmed milk	...	Makhan nikala hua doodh

MISCELLANEOUS

1.	Brown sugar	...	Shakar
2.	Coconut	...	Narial
3.	Hydrogenated fat	...	Jamaya hua tel *e.g.*, Dalda, Rath etc.
4.	Jaggery	...	Gur
5.	Roasted ground-nuts	...	Bhuni huei moongphali
6.	Sugar	...	Chini
7.	Oil	...	Tel

7.8.89

7.8.89

C. F. T. R. I. LIBRARY, MYSORE.

Acc. No. 4252

Call No. ~~L:5730~~ ~~F8,3:057~~ ~~L,332.3 N59~~

F8,3:2;47 N59

Please return this publication on or before the last DUE DATE stamped below to avoid incurring overdue charges.

P. No.	Due Date	Return date
Rct. 185		

VERIFIED 2013

CFTRI-MYSORE

4252

Menus for low co.